

Serial Number 09/538,731

It is respectfully submitted that amended claim 8 is allowable because, although the broad concept recited in original claim 8 appears to be disclosed in U.S. Patent No. 4,588,259 (Sheiman), neither the Sheiman patent nor U.S. Patent No. 5,483,254 (Powell) discloses or suggests placement of a microprism sheet, polarizers, *and* polarized filters in a common housing, as originally recited in claim 9.

More particularly, the following points were made during the interview:

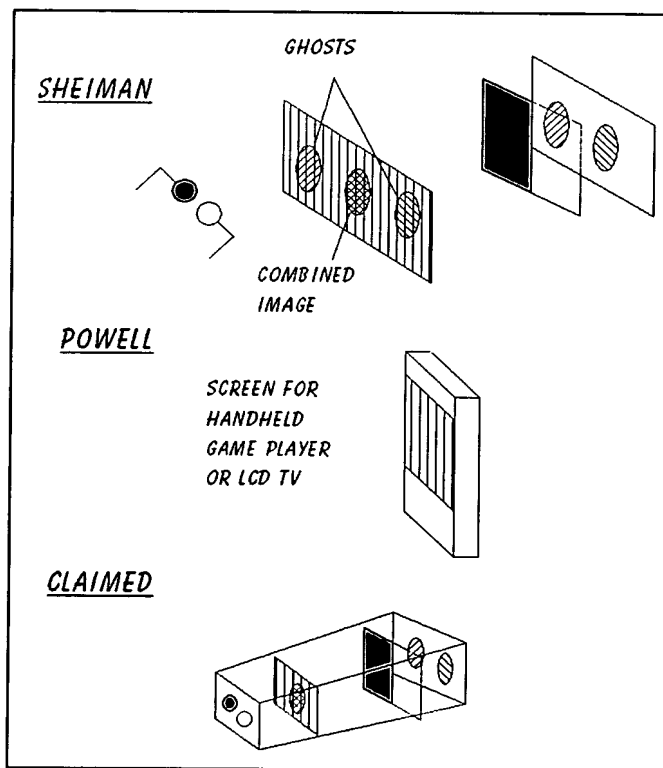
- a. Sheiman's polarized filters are in the form of glasses designed to be worn by a user, and therefore Sheiman's filters could not be placed in a housing as claimed.
- b. Since Powell does not disclose any sort of polarized filters, but rather merely discloses a grooved display screen that enhances the field of view of an LCD display so that stereoscopic effects to be viewed on a "Game Boy" or pocket television, Powell could not have suggested the claimed inclusion in a common housing of polarized filters, a microprism sheet, and polarizers.
- c. The inclusion of the polarized filters, microprism sheet, and polarizers in the same housing as the display screen is not merely a matter of design choice, but rather makes the difference between practicality and inoperativeness. The reason that the inclusion of polarized filters in the housing is critical is that without the cropping or masking effect provided by the housing, left and right ghost images will be visible next to the main stereoscopic image. Due to the polarization, the right ghost image will only be visible to the right eye and the left ghost image will only be visible to the left eye, resulting in an arrangement that will literally give the user a headache. The invention of claim 9, in contrast, permits the ghost images to be eliminated by the cropping effect of the housing.

Basically, Applicant's argument is that if it were obvious to modify the Sheiman device to include polarized filters in a common housing with the polarizers, microprism sheet, and display screen (not in original claim 9, but added by this amendment), then Sheiman would not have used glasses since, in practice, a Sheiman-type system that relies on glasses suffers from ghost images. As demonstrated during the interview, these ghost images are highly visible and are situated sufficiently close to the main image as to constitute a significant distraction.

The prior art applied against claim 9 may be summarized in the accompanying illustration. While the Sheiman patent uniquely discloses the use of what is effectively a microprism image combiner, thereby permitting the use of a simple sheet polarizer for each side-by-side image (and thereby eliminating the need for switching or other much more complex image discriminating schemes), the system disclosed by Sheiman is essentially unworkable due to the ghost images. This may be why no other patent discloses a similar system (and why the owners of the patent gave up on it by not paying the third maintenance fee).

The arrangement disclosed by Powell, on the other hand, adds nothing to the system of Sheiman since it merely involves an image enhancing screen applied to a handheld game player or

television. There is no obvious connection between the system of Sheiman, which involves multiple separate components, and the device of Powell. This is not merely a matter of reducing



Comparison of Sheiman, Powell, and Claimed Invention

the size of the Sheiman system to fit within a handheld device, but a fundamental change in the manner in which the Sheiman system is implemented. Sheiman clearly adopts the conventional view that the polarized filters in such a system are desirably worn by the viewer, separately from the other components in the system.

Whereas the present invention fixes the polarized filters with respect to the other components, by including them in the claimed housing, thereby *limiting* the field of view (with the effect of eliminating the ghosts that plague the Sheiman system), both Sheiman and Powell seek to *increase* the field of view for their respective systems or devices. In fact, Powell not only seeks to increase the field-of-view of an LCD display, but also seeks to eliminate the need for polarizers that limit the field of view (see col. 2, lines 35-67), while Sheiman clearly also seeks to increase the field-of-view of its stereoscopic system, as evidenced by the following statement:

The system of this invention has distinct and clearly observable advantages over any other stereoscopic display system in that the original images can be seen in full-color, in any size, and by a multiplicity of observers from any angle of view and from any distance from the imaging source (Sheiman, col. 2, lines 26-31, emphasis added).

This statement suggests that a separate polarized filter arrangement was considered to be an inherent and advantageous part of the system disclosed in the Sheiman patent. As a result, it can reasonably be argued that the Sheiman patent would have had the effect of leading the ordinary artisan away from, *i.e.*, teaches away from, the presently claimed invention.

Since Sheiman and Powell both effectively teach away from the claimed arrangement in which the field of view is limited by including the polarized filters in a housing, rather than in eyeglasses, it is respectfully submitted that the rejection of original claim 9, now included in amended claim 8, is improper and should be withdrawn, and further that none of the other references of record could possibly have suggested modification of the system of Sheiman to include the polarized filters and other components in the same housing as the display, as presently claimed.

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For the reasons stated above, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,
BACON & THOMAS, PLLC

A handwritten signature in black ink, appearing to read 'By E Urcia', with a long horizontal flourish extending to the right.

By: BENJAMIN E. URCIA
Registration No. 33,805

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BACON & THOMAS, PLLC
625 Slaters Lane, 4th Floor
Alexandria, Virginia 22314

Telephone: (703) 683-0500

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APPENDIX B
(Marked-Up Copy Of Amended Claims)

8. (Amended) A stereoscopic effects device, comprising:

an image interlacing arrangement including

at least one video display screen;

a microprism sheet including a substrate and a plurality of grooves having intersecting sides that form a v-shape, the sides of the grooves forming first and second sets of substantially planar surfaces,

wherein said sides of the grooves are respectively arranged to refract light from first and second image sources so that said light from separate first and second images on said video display screen exits said microprism sheet in parallel to form an interlaced image;

polarizers situated between said video display screen and said microprism sheet; and

polarized filters situated between said microprism sheet and respective left and right eyes of a person,

wherein said at least one video display screen, microprism sheet, polarizers, and polarized filters are situated in a common housing.